

REMARKS

Applicant amended independent claim 11 to recite that the second subsurface forms a cavity in the plunger of the closing member. Further, applicant added new claim 27, depending from claim 11, reciting leg members extending from the second subsurface of the plunger. Support for these feature is provided, for example, in FIG. 1 of the above-identified application, showing the second subsurface 36 forming the cavity in the plunger, and the leg members extending from the second subsurface. Applicant also amended the specification to add a written description corresponding to these features now recited in claims 11 and 27.

Additionally, applicant amended claims 13 and 17 for greater clarity. Applicant also added new independent claim 27.

The examiner objected to the amendment of the specification filed on August 8, 2006, on the ground that the amendment introduced new matter into the disclosure. To expedite prosecution of the above-identified application, applicant amended the specification to remove the description added in the August 8, 2006, amendment.

The examiner rejected claims 12 and 26 under 35 U.S.C. §112, first paragraph. To expedite prosecution of the above-identified application, applicant cancelled claims 12 and 26.

The examiner rejected claims 11-14, 17, 19-21, 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,285,931 to Alfons in view of U.S. Patent No. 5,368,207 to Cruysberghs.

Applicant's amended independent claim 11 recites "the closing member extending from the first chamber through the first and second opening to the second chamber, a first subsurface of the closing member being situated in the first chamber and a second subsurface of the closing member being situated in the second chamber, ... and the closing member comprises a plunger movable in axial direction of the cylinder so as to change the volume of the second chamber, ... and wherein the second subsurface forms a cavity in the plunger of the closing member."

The examiner admitted, with respect to his rejection of independent claim 11 that "the patent to Alfons disclosed all the claimed features with the exception of having a 'plunger' e.g., a

reciprocating piston element, moving within the cylinder enclosing space 5, 'sealed by an outer sealing ring (claim 17)' " (Final Action, page 6).

The examiner, however, relies on Cruysberghs as allegedly showing the features pertaining to applicant's recited plunger.

Cruysberghs describes a pressure generator apparatus disposed within a pressurized container for enabling product contained in the container to be dispensed at predetermined constant pressure (Abstract). With respect to the embodiment shown in FIG. 8 (and referred to by the examiner), Cruysberghs explains:

An additional preferred embodiment of a pressure generator which is also adapted to operate within the container 10 is shown in FIG. 8 and is referred to in general with the numeral 134. The pressure generator 134 is formed by a cylindrical vessel 136 having closed lower and upper ends. An opening 136a is provided through the wall of the vessel 136 for reasons to be described.

A horizontal partition 138 is integrally secured within the vessel 136 and defines a high pressure chamber 140 disposed between the partition 138 and the lower end of the vessel 136. An opening 138a is provided through the partition 138 disposed coaxially with the vessel 136. An annular groove is formed in that portion of the partition 138 defining the opening 138a for receiving a sealing member, preferably in the form of an O-ring, 142.

A piston rod 144 attached to a plunger 146 operates within the vessel 136 and extends through the opening 138a with the plunger 146 disposed above the partition 138. The rod 144 has a tapered lower end 144a and a notch, or groove, 144b is formed in the rod 144 above the partition 138 for reasons to be described. An annular groove is provided in the outer circumference of the plunger 146 and receives a sealing member, preferably in the form of an O-ring, 148. A prepressure chamber 150 is defined between the plunger 146 and the upper end of the vessel 136 which is pressurized to urge the plunger 146 downwardly, as will be described. A chamber 152 is defined between the plunger 146 and the partition 138, is pressurized to urge the plunger 146 upwardly. (Cruysberghs, FIG. 8 and col. 9, lines 18-48)

Thus, while Cruysberghs' piston rod 144 (akin to claim 14's recited stem) includes a notch or groove (144b in Cruysberghs' FIG. 8), the plunger itself, as seen from FIG. 8, does not include a surface (or subsurface) forming a cavity in the plunger. Accordingly, Cruysberghs fails to disclose or suggest at least the features of "the closing member extending from the first chamber through the first and second opening to the second chamber, a first subsurface of the closing member being situated in the first chamber and a second subsurface of the closing member being situated in the second chamber, ... and the closing member comprises a plunger

movable in axial direction of the cylinder so as to change the volume of the second chamber, ... and wherein the second subsurface forms a cavity in the plunger of the closing member," as required by applicant's independent claim 1.

Because neither Alfons, nor Cruysberghs, discloses or suggests, alone or in combination, at least the features of "the closing member extending from the first chamber through the first and second opening to the second chamber, a first subsurface of the closing member being situated in the first chamber and a second subsurface of the closing member being situated in the second chamber, ... and the closing member comprises a plunger movable in axial direction of the cylinder so as to change the volume of the second chamber, ... and wherein the second subsurface forms a cavity in the plunger of the closing member," applicant's independent claim 11 and the claims depending from it are therefore patentable over the cited art.

New independent claim 28 recites "a closing member comprising a plunger having a stem axially extending from one axial end of the plunger; a free end of the stem defines a first subsurface and an axial end of the plunger opposite the stem defines a second subsurface; ... wherein the second subsurface forms a cavity in the plunger of the closing member." For reasons similar to those provided with respect to independent claim 11, at least these features are not disclosed by the cited art. Independent claim 28 is therefore patentable over the cited art.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing, applicant respectfully submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim

Applicant : Jaap Herman Van't Hoff
Serial No. : 10/657,250
Filed : September 9, 2003
Page : 13 of 13

Attorney's Docket No.: 17042-004001

does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply any required fees to deposit account 06-1050, referencing the attorney docket number shown above.

Respectfully submitted,

Date:

July 26, 2007

Ido Rabinovitch

Ido Rabinovitch
Reg. No. L0080

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906